Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A surgical access system for accessing a ~~surgical~~ target site within a spine, comprising:

a distraction assembly comprising at least two dilators adapted for sequential insertion to ~~said~~ a surgical target site within a spine to create a distraction corridor to said surgical target site, a larger of said at least two dilators having an exterior circumference;

a primary retractor assembly having a handle assembly and a plurality of retractor blades ~~removably~~ coupled to said handle assembly and extending generally perpendicularly relative to arm portions of the handle assembly, each of said plurality of retractor blades having a generally concave inner face and a generally convex exterior face, said plurality of retractor blades abutting each other in a closed position and forming a closed perimeter, said perimeter defining a lumen having an internal circumference larger than said external circumference of said larger dilator such that [[said]] said plurality of retractor blades ~~can be introduced~~ are deliverable to said surgical target site simultaneously over said larger dilator while in said closed position, said plurality of retractor blades being movable relative to each other to an open position forming an open perimeter and wherein said internal circumference is enlarged relative to said closed position to create and maintain an operative corridor to said surgical target site, wherein said plurality of retractor blades includes a cephalad-most and a caudal-most blade when said primary retractor assembly is delivered to said surgical target site, said cephalad-most blade is movable relative to said caudal-most blade in a cephalad direction when said plurality of blades are moved to said open position; and

a supplemental retractor assembly having an arm with an additional retractor blade coupled to said arm, said arm being selectively ~~coupleable~~ positionable adjacent to said primary retractor assembly subsequent to moving said plurality of retractor blades into said open position such that said additional blade fills a space in said open perimeter, said supplemental blade being moveable in a direction generally perpendicular to said cephalad direction to further expand said operative corridor.

2. (Previously Presented) The system of claim 1, wherein said distraction assembly includes a K-wire adapted to be introduced to said surgical target site.

3. (Previously Presented) The system of claim 1, wherein said distraction assembly includes at least three sequential dilators.

4. (Previously Presented) The system of claim 1, wherein said plurality of retractor blades is three retractor blades.

5. (Previously Presented) The system of claim 1, further comprising at least one shim member adapted to be coupled to at least one of said retractor blades, said shim member including a contiguous extension dimensioned to extend past said retractor blade into the surgical target site.

6. (Previously Presented) The system of claim 5, wherein at least one of said distraction assembly and one or more of said retractor blades includes at least one stimulation electrode.

7. (Currently Amended) The system of claim 6, further comprising a control unit configured to ~~capable of~~ electrically stimulate[ing] said at least one stimulation electrode, monitor electromyographic activity detected by a set of sensor electrodes coupled to leg muscle myotomes associated with nerves in the vicinity of said surgical target site within the spinc~~sensing a response of a nerve depolarized by said stimulation~~, and display on a display screen a numeric stimulation threshold required to evoke the electromyographic activity so as to indicate ~~determining~~ at least one of a proximity and a direction from at least one of said distraction assembly and one or more of said retractor blades to at least one of the nerves ~~based upon the sensed response, and communicating said at least one of proximity and direction to a user~~.

8. (Currently Amended) The system of claim 7, ~~further comprising an~~ wherein each electrode of the set of sensor electrodes is configured to sense ~~an said~~ EMG response ~~of said muscle coupled to said depolarized nerve, the electrode being operable to send~~ communicate the EMG response to the control unit.

9. (Currently Amended) The system of claim 1, wherein [[said]] said arm of said supplemental retractor assembly couples to said handle assembly.

10. (Cancelled)

11. (Currently Amended) The system of claim 1, wherein said surgical access system ~~for establishing an operative corridor to a surgical target site~~ is configured to establish said operative corridor via at least one of a posterior, anterior, postero-lateral, and a lateral, trans-psoas approach.

12. (Previously Presented) The system of claim 7, further comprising a handle coupled to at least one of said distraction assembly and one or more of said retractor blades, the handle delivering the electrical stimulation from said control unit to said at least one stimulation electrode.

13. (Currently Amended) The system of claim 7, wherein the display screen of the control unit ~~comprises a display~~ is operable to display an ~~said~~ EMG response detected by at least one of the sensor electrodes coupled to the leg muscle myotomes ~~of the muscle~~.

14. (Original) The system of claim 7, wherein the control unit comprises a touch-screen display operable to receive commands from a user.

15. (Currently Amended) The system of claim 6[[7]], wherein the at least one stimulation electrode[[s]] ~~are~~ is positioned near a distal end of at least one of the ~~initial~~ distraction assembly and one or more of said retractor blades.

16. (Currently Amended) A method of accessing a surgical target site within a spine, comprising the steps of:

(a) creating a distraction corridor along a lateral, trans-psoas path to a targeted lumbar spinal disc in a lumbar spine ~~to the surgical target site~~ using a distraction assembly comprising at

least two dilators ~~adapted for~~ that are sequentially inserted[[ion]] along the lateral, trans-psoas path to the targeted lumbar spinal disc ~~to said surgical target site~~;

(b) ~~removably coupling~~ slidably advancing a plurality of retractor blades of a retraction assembly [[to]] along an outermost dilator of the at least two dilators of the distraction assembly, the retraction assembly comprising a handle assembly coupled to the plurality of retractor blades such that the retractor blades extend generally perpendicularly relative to arm portions of the handle assembly ~~of said retractor assembly~~, each of said plurality of retractor blades having a generally concave inner face and a generally convex exterior face, said handle assembly being capable of moving said plurality of retractor blades from a closed position to an open position, said closed position being characterized by said plurality of retractor blades being positioned to abut one another and form a closed perimeter, said open position characterized by said plurality of retractor blades being positioned generally away from one another and forming an open perimeter;

(c) simultaneously introducing said plurality of retractor blades over the outermost dilator of said distraction assembly along the lateral, trans-psoas path to the targeted lumbar spinal disc ~~into said distraction corridor~~ while in said closed position;

(d) actuating said handle assembly to ~~open~~ move said plurality of retractor blades to the open position so that the plurality of retractor blades create an operative corridor along the lateral, trans-psoas path to the targeted lumbar spinal disc ~~to said surgical target site~~;

(e) releasably engaging a fixation element with at least one of the plurality of retractor blades so that a distal portion of the fixation element extends distally from the at least one retractor blade and penetrates into a lateral aspect of the lumbar spine, wherein the fixation element secures the at least one retractor blade to the lumbar spine;

(f) inserting an implant through the operative corridor created by the plurality of retractor blades along the lateral, trans-psoas path to the targeted lumbar spinal disc

~~(e) coupling an additional retractor blade to said retractor assembly after said plurality of retractor blades have been moved to said open position such that said additional retractor blade fills a space in said open perimeter created when said plurality of retractor blades were moved from said closed position to said open position; and~~

~~(f) moving said additional retractor blade to expand said operative corridor~~.

17. (Currently Amended) The method of claim 16, wherein said step of creating a distraction corridor is accomplished by introducing a K-wire to said surgical target site, ~~and thereafter~~ slideably advancing ~~at least one dilator~~ one of said at least two dilators over said K-wire, and then slidably advancing a second of said at least two dilators over said first dilator.

18. -19. (Cancelled)

20. (Currently Amended) The method of claim 16, further comprising the steps of performing neuromonitoring during at least one of steps (a), (c), and (d)~~, and (f)~~, wherein a control unit of a neuromonitoring system displays ~~and communicating~~ a result of said neuromonitoring to a user.

21. (Currently Amended) The method of claim 20, wherein said step of creating a distraction corridor is accomplished by introducing a K-wire to said targeted lumbar spinal disc ~~surgical target site~~, slideably advancing one of said at least two dilators over said K-wire, and then slidably advancing a second of said at least two dilators over said first dilator ~~and wherein the result of said neuromonitoring is an EMG response~~.

22. (Previously Presented) The method of claim 21, wherein the result is indicative of at least one of the presence, distance, and direction of neural structures relative to at least one of said K-wire, one or more of said dilators, and one or more of said plurality of retractor blades.

23. (Currently Amended) The system of claim 7, wherein said control unit is configured to determine said at least one of nerve proximity and nerve direction by determining the numeric stimulation threshold required to evoke the electromyographic activity ~~a threshold stimulation level required to evoke said EMG response~~.

24. (Currently Amended) The system of claim 23, wherein said control unit determines said ~~threshold~~ numeric stimulation threshold by establishing a first bracket containing said ~~threshold~~ numeric stimulation threshold and bisecting said bracket to form a smaller second bracket containing said ~~threshold~~ numeric stimulation threshold.

25. (Previously Presented) The method of claim 22, wherein the result is a threshold stimulation level required to evoke said EMG response.

26. (Previously Presented) The method of claim 25, wherein said threshold stimulation level is determined by establishing a first bracket containing said threshold stimulation level and then bisecting said bracket to form a smaller second bracket containing said threshold stimulation level.

27. (New) The method of claim 16, further comprising coupling one or more fiber optic cables to the plurality of retractor blades to emit light toward the targeted lumbar spinal disc.

28. (New) The method of claim 16, wherein the fixation element comprises a shim structure to penetrate into the targeted lumbar spinal disc.

29. (New) The method of claim 16, further comprising anchoring an inner wire member to a disc annulus at the lateral aspect of the targeted lumbar spinal disc such that a distal tip of the inner wire member is inserted along the lateral, trans-psoas path and penetrates into the disc annulus at the lateral aspect of the targeted spinal disc.

30. (New) The method of claim 29, further comprising initially defining the lateral, trans-psoas path to the targeted lumbar spinal disc using an elongate stimulation instrument that is delivered to a lateral aspect of the targeted lumbar spinal disc while a stimulation electrode of the elongate stimulation instrument outputs an electrical stimulation signal from a distal tip portion for nerve monitoring during delivery of the elongate stimulation instrument along the lateral, trans-psoas path to the targeted lumbar spinal disc.

31. (New) The method of claim 30, further comprising: activating a nerve monitoring system that controls the electrical stimulation signal output from the stimulation electrode of the elongate stimulation instrument during delivery of the elongate stimulation instrument along the lateral, trans-psoas path to the lumbar spine, the nerve monitoring system detecting electromyographic activity via a set of sensor electrodes coupled to leg muscle myotomes associated with nerves in the vicinity of the targeted spinal disc; and receiving nerve monitoring

information from a video display device of the nerve monitoring system that displays a numeric stimulation threshold required to evoke the electromyographic activity in at least one of said leg muscle myotomes.

32. (New) The method of claim 16, further comprising:

coupling an additional retractor blade to said retractor assembly after said plurality of retractor blades have been moved to said open position such that said additional retractor blade fills a space in said open perimeter created when said plurality of retractor blades were moved from said closed position to said open position; and

moving said additional retractor blade to expand said operative corridor prior to inserting the implant.